

IN THE SPECIFICATION

Please amend the specification as follows:

1. Amend paragraph [0005] as follows:

In such a configuration, digital modulation section 12 on the transmitting side carries out digital modulation on transmission data according to a modulation system such as BPSK (Binariphase Binary Phase Shift Keying) and 16QAM (Quadrature Amplitude Modulation), etc.

2. Amend paragraph [0052] and [0053] as follows:

FIG. 30A illustrates 16QAM signal points in the multi-carrier communication apparatus according to an embodiment of the present invention; and

FIG. 30B illustrates 16QAM signal points in the multi-carrier communication apparatus according to an embodiment of the present invention; and

FIG. 31 is a block diagram showing a configuration of a multi-carrier communication apparatus according to Embodiment 15 of the present invention.

3. Amend paragraph [0159] as follows:

On the other hand, pattern conversion section 161 of demapping section 109 in FIG. 2 carries out processing opposite the processing by pattern conversion section 151 at mapping section 103. That is, pattern conversion section 161 converts from a symbol pattern ~~wit~~ with 3 values "+1", "'1" and "0" to a symbol pattern with 2 values "+1" and "31 1" using the correspondence table shown in FIG. 14.

4. Amend paragraph [0206] as follows:

A radio signal received via antenna 506 is down-converted and converted from analog to digital by radio reception section ~~107~~ 507 and output to FFT section 508. FFT section 508 carries out a fast Fourier transform on the received signal and outputs the received symbol obtained to P/S conversion section 509.

5. Amend paragraphs [0214] and [0215] as follows:

FFT section 508 carries out a fast Fourier transform on the received signal into a received symbol, P/S conversion section 509 converts this to a received symbol string and outputs to digital modulation demodulation section 510.

The received symbol string is demodulated by digital modulation demodulation section 510 and the reception data obtained is output to pattern conversion section 561.

6. Amend paragraph [0318] as follows:

Demapping sections 615-1 to 615-n store information on the correspondence between the received symbol patterns and pre-conversion symbol patterns, ~~converts~~ convert the received symbol patterns output from ~~P/S conversion sections 813-1 to 813-n~~ despreading sections 913-1 to 913-n to pre-conversion symbol patterns and output to digital demodulation sections 616-1 to 616-n.

7. Amend paragraph [0361] as follows:

The multi-carrier communication apparatus of Embodiment 15, as illustrated in Fig. 31, ~~the present invention~~ adopts a configuration comprising a channel estimation section 3102 that estimates channels using a known signal, a replica signal generation section 3104 that generates a replica signal of a first symbol string mapped to subcarriers with the first symbol string including the first symbol using the result of above-described channel estimation, a received symbol pattern decision section 3106 that decides a received symbol pattern by comparing the above-described replica signal with the received symbol pattern and a demodulation section 111 that obtains reception data from the decided received symbol pattern.